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IN THE

Supreme Court of the United States

SHOKETSU KINZOKU KOGYO KABUSHIKI CO., LTD, a/k/a SMC CORPORATION and SMC PNEUMATICS, INC.,

Petitioners,

v.

FESTO CORPORATION,

Respondent.

On Petition for Writ of Certiorari to the United States Court of Appeals for the Federal Circuit

PETITION FOR WRIT OF CERTIORARI

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QUESTIONS PRESENTED FOR REVIEW

Less than two years ago, this Court in this case resolved the inherent tension between our statutory claiming system and the doctrine of equivalents by establishing the presumption that a narrowed claim element is limited to the precise scope selected by the patentee and by holding that the presumption cannot be rebutted where the claim element, before narrowing, covered the now accused equivalent. *Festo v. SMC*, 535 U.S. 722 (2002).

The Federal Circuit's 11-2 *en banc* decision on remand, which was favorable to SMC but which did not end the case, negates this Court's presumption by (1) negating this Court's test for rebutting the presumption and (2) failing to consider this Court's holding that the presumption cannot be rebutted for a claim element that, before narrowing, covered the now accused equivalent.

The questions presented, therefore, are –

1. Is the test for rebutting the presumption that, as stated by this Court, "[t]he patentee must show that at the time of the amendment one skilled in the art could not reasonably be expected to have drafted a claim that would have literally encompassed the alleged equivalent"? *Id.* at 741.

2. Is a narrowed claim element limited to the precise scope selected by the patentee where, as stated by this Court, "the original application once embraced the purported equivalent but the patentee narrowed his claims to obtain the patent or to protect its validity [since the patentee] knew the words for both the broader and narrower claim, and affirmatively chose the latter"? *Id.* at 734-35.

PARTIES TO THE PROCEEDING

The caption of the case contains the names of all the parties. SMC Pneumatics, Inc. is now SMC Corporation of America. SMC Corporation is its parent. There is no parent or publicly held company owning 10% or more of SMC Corporation's stock.

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OPINIONS BELOW

The first Federal Circuit panel decision, 72 F.3d 857 (Fed. Cir. 1995), was vacated by this Court, 520 U.S. 111 (1997). The second Federal Circuit panel decision, 172 F.3d 1361 (Fed. Cir. 1999), was vacated by the *en banc* Federal Circuit, 187 F.3d 1381 (Fed. Cir. 1999), which was followed by an *en banc* decision on the merits, 234 F.3d 568 (Fed. Cir. 2000). This Court granted certiorari, 533 U.S. 915 (2001), followed by a decision on the merits, 535 U.S. 722 (2002). The Federal Circuit ordered an *en banc* hearing, 304 F.3d 1289 (Fed. Cir. 2002), which was followed by the *en banc* decision, 344 F.3d 1359 (Fed. Cir. 2003), which is the subject of this petition.

BASIS FOR JURISDICTION

The judgment sought to be reviewed issued September 26, 2003. Petitions for rehearing were denied on November 5, 2003. The statutory provision believed to confer on this Court jurisdiction to review on a writ of certiorari the judgment in question is 28 U.S.C. §1254(1).

CONSTITUTIONAL AND STATUTORY PROVISIONS INVOLVED

Article 1, section 8, clause 8 of the Constitution provides

Congress shall have the power ... to promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their Respective Writings and Discoveries.

35 U.S.C. §112, ¶2 provides

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

STATEMENT OF THE CASE

This Court's 2002 Decision

35 U.S.C. §112, ¶2, requires a patent applicant to particularly point out and distinctly claim his invention. The application is examined by the patent examiner on the basis of the claim chosen by the applicant. If the applicant claims more broadly to obtain greater protection, the examiner is more likely to reject his claim. If he claims more narrowly, the examiner is more likely to allow his claim but he receives less protection. After the patent issues, the claim provides the important notice to the public of the scope of the patent grant. "A patent holder should know what he owns and the public should know what he does not." *Festo v. SMC*, 535 U.S. 722, 731 (2002). The doctrine of equivalents is in tension with this claiming system. When applicable, it permits the patentee to obtain protection on subject matter which the examiner did not examine for patentability, and largely negates the ability of the public to "know what [the patentee] does not [own]" and "to pursue innovations, creations, and new ideas beyond the inventor's exclusive rights." *Id.*

This Court in its 2002 decision held that, where a patentee narrows a claim element during prosecution, there is a presumption that the narrowed element is restricted to its literal scope which, of course, is the precise scope that the patentee selected. This Court stated the test for rebutting the presumption to be as follows – "The patentee must show that at the time of the amendment one skilled in the art could not reasonably be expected to have drafted a claim that would have literally encompassed the alleged equivalent." *Id.* at 741. As explained by the Court, the basis for this test is that the doctrine of equivalents is "premised on language's inability [in some instances] to capture the essence of innovation." *Id.* at 734. Therefore, "[w]here the original

application once embraced the purported equivalent but the patentee narrowed his claims to obtain the patent or to protect its validity, the patentee cannot assert that he lacked the words to describe the subject matter in question." *Id.* In this instance, the presumption cannot be rebutted because "the prosecution history has established that the inventor ... knew the words for both the broader and narrower claim, and affirmatively chose the latter." *Id.* at 734-35.

To like effect is this Court's specific holding that "[w]hen, however, the patentee originally claimed the subject matter alleged to infringe but then narrowed the claim in response to a rejection, he may not argue that the surrendered territory comprised unforeseen subject matter that should be deemed equivalent to the literal claims of the issued patent." *Id.* at 733-34.

The Federal Circuit's En Banc Decision On Remand

In this case, as specifically held by the Federal Circuit upon remand, Festo's original claims literally covered the now accused equivalents, SMC's aluminum sleeve and one sealing ring, but Festo narrowed these claims and, as narrowed, they no longer cover them. Appendix (App.) 15a, 18a. Thus, this situation fits exactly within this Court's pronouncement that Festo "knew the words for both the broader and narrower claim, and affirmatively chose the latter" (535 U.S. at 735) and, therefore, Festo "may not argue that the surrendered territory comprised unforeseen subject matter that should be deemed equivalent to the literal claims of the issued patent" (*id.* at 733-34). Simply, since Festo once literally claimed what it now tries to reach under the doctrine of equivlaents, it cannot now say that it was unable to do so.

Before the Federal Circuit on remand and in response to SMC's motion for judgment on the basis of this Court's

2002 decision, Festo argued that it was unreasonable to expect it to have drafted a claim to cover an aluminum sleeve and one sealing ring because such a design was, in Festo's view, "inferior" and "unacceptable." App. 17a, 20a. The Federal Circuit properly rejected this argument: "[Festo's argument] suggests that Stoll [Festo's inventor] could have described an aluminum sleeve but chose not to do so because that 'inferior' element was not a part of his invention" (App. 17a); and, as to the one sealing ring, "[w]e again reject that argument as unpersuasive because, if the patentees knew of an inferior design and chose not to include it within the claims, then it cannot be said that they could not have been expected to have described that design" (App. 20a).

The Federal Circuit further held that no linguistic or other limitation prevented Stoll from describing either of the two accused equivalents (App. 17a, 20a), that "he reasonably could have been expected to have described a sleeve made of a common nonmagnetizable material, such as aluminum, if that were what he intended to claim" (App. 17a) and, similarly, that he "easily could have encompassed SMC's sealing ring by claiming, for example, 'at least one sealing ring'" (App. 20a).

At this point, this case should have been over with judgment for SMC. The Federal Circuit's clear findings on remand establish that Festo cannot show "that at the time of the amendment one skilled in the art could not reasonably be expected to have drafted a claim that would have literally encompassed the alleged equivalent." 535 U.S. at 741. Such a result is hardly surprising since this Court in its 2002 decision noted that "[o]n these questions, respondents [SMC] may well prevail, for the sealing rings and the composition of the sleeve both were noted expressly in the prosecution history." *Id.*

However, the Federal Circuit did not end the case. Rather than applying this Court's test for rebutting the presumption that a narrowed claim element is limited to its literal language -- "[t]he patentee must show that at the time of the amendment one skilled in the art could not reasonably be expected to have drafted a claim that would have literally encompassed the alleged equivalent" -- the Federal Circuit instead looked to the three circumstances in which this Court suggested the presumption might be rebutted:

> The equivalent may have been unforeseeable at the time of the application; the rationale underlying the amendment may bear no more than a tangential relation to the equivalent in question; or there may be some *other* reason suggesting that the patentee could not reasonably be expected to have described the insubstantial substitute [accused equivalent] in question.

Id. at 740-741, emphasis added. In doing so, the Federal Circuit's decision failed to recognize that, whatever the circumstance, the patentee must meet this Court's fundamental test. That he must do so is readily apparent from this Court's use of the word "other" in the third circumstance since this circumstance recites this Court's fundamental test.

By reciting this Court's fundamental test, this third circumstance -- "some *other* reason suggesting that the patentee could not reasonably be expected to have described the insubstantial substitute in question" (emphasis added) -- makes clear that the first two circumstances (unforeseeability and tangentialness) do not stand alone and are necessarily also subject to this fundamental test.

The Federal Circuit's decision fails to recognize this important point. Its failure to do so is particularly pertinent since, in considering the third circumstance, the Federal Circuit found that Festo easily could have drafted a claim that literally covered the SMC device that is now said by Festo to be "equivalent." This finding -- that Festo could not meet this Court's fundamental test -- should have ended this case. However, the Federal Circuit continued on and found for SMC on the second circumstance (tangentialness), but it remanded to the district court on the first circumstance (unforeseeability), albeit with the statement that SMC should likely prevail on this circumstance since Festo chose not to cover a nonmagnetizable sleeve and one sealing ring in its narrowed claims because it considered these features to be "inferior" and "unacceptable." App. 17a, 20a.

The Federal Circuit's decision also fails to recognize the import of its specific finding that Festo's original claims covered SMC's nonmagnetizable sleeve and one sealing ring, that Festo narrowed these claims and that, as narrowed, they no longer cover these now accused equivalents. App. 15a, 18a. This finding also should have ended this case with judgment for SMC since this Court specifically held that, in such an instance, the patentee cannot rebut the presumption since he "knew the words for both the broader and narrower claim, and affirmatively chose the latter." 535 U.S. at 735.

Thus, the Federal Circuit's decision, by not considering the term "other" in the third circumstance, negates this Court's presumption by negating this Court's test for rebutting the presumption. Further, the Federal Circuit's decision, by not considering it, negates this Court's specific holding that the presumption cannot be rebutted where the claim, prior to narrowing, covered the now accused equivalent.

REASONS FOR GRANTING THE WRIT

The Federal Circuit's Decision Negates This Court's Presumption By Negating This Court's Test For Rebutting The Presumption

This Court in its 2002 decision carefully crafted its new presumption to achieve a "delicate balance" between inventors "who rely on the promise of the law to bring the invention forth" and "the public which should be encouraged to pursue innovations, creations, and new ideas beyond the inventor's exclusive rights." 535 U.S. at 731.

The public cannot pursue such innovations, creations and new ideas beyond the inventor's exclusive rights unless it knows the boundaries of these rights. Clarity as to these boundaries "is essential to promote progress, because it enables efficient investment in innovation."

> The patent laws "promote the Progress of Science and useful Arts" by rewarding innovation with a temporary monopoly. U.S. Const., Art. I, § 8, cl. 8. The monopoly is a property right; and like any property right, its boundaries should be clear. The clarity is essential to promote progress, because it enables efficient investment in innovation. A patent holder should know what he owns, and the public should know what he does not.

Id. at 730-31.

This balance achieved by this Court with its presumption is defined in the Court's test for rebutting the presumption – "the patentee must show that at the time of the amendment one skilled in the art could not reasonably be expected to have drafted a claim that would have literally

encompassed the alleged equivalent." *Id.* at 741. By not requiring application of this test to rebut the presumption, the Federal Circuit's decision negates this Court's presumption and the balance this Court sought to achieve with this presumption.

The Federal Circuit's Decision Also Negates This Court's Presumption By Not Considering This Court's Holding That The Presumption Cannot Be Rebutted Where The Claim, Before Narrowing, Covered The Now Accused Equivalent

This Court in its 2002 decision further clarified the presumption it had crafted by specifically holding that this presumption cannot be rebutted where the original claim, before narrowing, covered the accused equivalent because, in this instance, "the patentee cannot assert that he lacked the words to describe the subject matter in question [since he] knew the words for both the broader and narrower claim, and affirmatively chose the latter." *Id.* at 734-35. The Federal Circuit's decision also negates this Court's presumption by failing to consider this specific and important holding.

CONCLUSION

For the foregoing reasons, the petition should be granted.

Respectfully submitted,

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APPENDIX

APPENDIX A

United States Court of Appeals for the Federal Circuit

95-1066

FESTO CORPORATION,

Plaintiff-Appellee,

v.

SHOKETSU KINZOKU KOGYO KABUSHIKI CO., LTD., a/k/a SMC CORPORATION, and SMC PNEUMATICS, INC.,

Defendants-Appellants.

On remand from the Supreme Court of the United States

DECIDED: September 26, 2003

Before MAYER, *Chief Judge*, NEWMAN and MICHEL, *Circuit Judges*, PLAGER, *Senior Circuit Judge*,* LOURIE, CLEVENGER, RADER, SCHALL, BRYSON, GAJARSA, LINN, DYK, and PROST, *Circuit Judges*.

Opinion for the court filed by *Circuit Judge* LOURIE, in which *Circuit Judge* MICHEL, *Senior Circuit Judge* PLAGER, and *Circuit Judges* CLEVENGER, RADER, SCHALL, BRYSON, GAJARSA, LINN, DYK, and PROST join. Concurring opinion filed by *Circuit Judge RADER*. Opinion concurring in part and dissenting in part filed by *Circuit Judge* NEWMAN, in which *Chief Judge* MAYER joins.

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* *See* 28 U.S.C. § 46(c)(2) (allowing senior circuit judges "to continue to participate in the decision of a case or controversy that was heard or reheard by the court at a time when such judge was in regular active service").

LOURIE, *Circuit Judge*.

This case is back to this court on remand from the Supreme Court of the United States for adjudication as to whether prosecution history estoppel bars Festo from relying on the doctrine of equivalents in this patent infringement suit. *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 535 U.S. 722 (2002) ("*Festo VIII*"). The sole issue specifically before us is whether Festo can rebut the presumption that the filing of narrowing amendments for the two patents in suit surrendered all subject matter between the original claim limitations and the amended claim limitations. *Id.* at 741. For the reasons set forth herein, we conclude that Festo cannot overcome that presumption by demonstrating that the rationale underlying the narrowing amendments bore no more than a tangential relation to the accused equivalents or by demonstrating that there was "some other reason" such that the patentee could not reasonably have been expected to have described the accused equivalents. However, we remand to the district court to determine whether Festo can rebut the presumption of surrender by establishing that the equivalents in question would have been unforeseeable to one of ordinary skill in the art at the time of the amendments.

BACKGROUND

Enough has been written about the facts and prior decisions in this case that we need not provide more than a brief summary here. This litigation began in 1988 when Festo filed suit against Shoketsu Kinzoku Kogyo Kabushiki Co. and SMC Pneumatics, Inc. (collectively, "SMC") for infringement of United States Patents 4,354,125 (the "Stoll patent") and B1 3,779,401 (the "Carroll patent"), which relate to magnetically coupled rodless cylinders. The United States District Court for the District of Massachusetts granted partial summary judgment that SMC's accused device infringed claims 5, 6, and 9 of the

Carroll patent under the doctrine of equivalents, and a jury found that SMC's accused device infringed claim 1 of the Stoll patent under the doctrine of equivalents. *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, No. 88-1814-PBS (D. Mass. Oct. 27, 1994) ("*Festo I*").

After initially affirming the district court's judgment, *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 72 F.3d 857 (Fed. Cir. 1995) ("*Festo II*"), *vacated and remanded*, 520 U.S. 1111 (1997) ("*Festo III*"),[1] we eventually took the case *en banc* to address certain issues relating to prosecution history estoppel and the doctrine of equivalents that "remained in the wake of" the Supreme Court's decision in *Warner-Jenkinson Co. v. Hilton Davis Chemical Co.*, 520 U.S. 17 (1997). *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 234 F.3d 558, 563 (Fed. Cir. 2000) (en banc) ("*Festo VI*"). In our *en banc* decision, we held that: (1) a "substantial reason related to patentability" that may give rise to an estoppel is not limited to overcoming prior art under 35 U.S.C. § 102 or § 103, but encompasses other reasons relating to the statutory requirements for a patent, including compliance with 35 U.S.C. § 112, *id.* at 566; (2) a "voluntary" claim amendment — *i.e.*, one neither required by a patent examiner nor made in response to a rejection by an examiner for a stated reason — may give rise to prosecution history estoppel, *id.* at 568; (3) no range of equivalents is available for an amended claim limitation when prosecution history estoppel applies, *id.* at 569; and (4) "unexplained" amendments are not entitled to any range of equivalents, *id.* at 578 (citing *Warner-Jenkinson*, 520 U.S. at

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[1] On a first remand from the Supreme Court, a panel of this court again affirmed the district court's judgment of infringement under the doctrine of equivalents. *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 172 F.3d 1361 (Fed. Cir. 1999) ("*Festo IV*"). We then granted SMC's petition for rehearing *en banc*. *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 187 F.3d 1381 (Fed. Cir. 1999) ("*Festo V*").

33). Applying those principles to the facts of this case, we concluded that the limitations at issue in the Stoll and Carroll patents had been narrowed by amendments made during prosecution and reexamination, respectively, and that Festo had failed to establish reasons unrelated to patentability for those amendments. *Id.* at 587-91. We therefore held that no range of equivalents was available for the amended claim limitations and reversed the district court's judgment of infringement with respect to both patents. *Id.* at 588-91.

The Supreme Court then granted certiorari to review our *en banc* decision. *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 533 U.S. 915 (2001) ("*Festo VII*"). First, the Court agreed with our holding that "a narrowing amendment made to satisfy any requirement of the Patent Act may give rise to an estoppel." *Festo VIII*, 535 U.S. at 736. Second, however, the Court disagreed with our adoption of a complete bar to the doctrine of equivalents when prosecution history estoppel arises. *Id.* at 737. The Court instead established a presumption that a narrowing amendment made for a reason of patentability surrenders the entire territory between the original claim limitation and the amended claim limitation, and explained that a patentee may overcome that presumption by showing that "at the time of the amendment one skilled in the art could not reasonably be expected to have drafted a claim that would have literally encompassed the alleged equivalent." *Id.* at 741. Specifically, the Court enumerated the three ways in which the patentee may overcome the presumption — *i.e.*, by demonstrating that "the equivalent [would] have been unforeseeable at the time of the [amendment],"[2] that "the

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[2] The Supreme Court referred to unforeseeability both at the "time of the amendment" and at the "time of the application." *Festo VIII*, 535 U.S. at 738, 741. We clarify that the time when the narrowing amendment was made, and not when the application was filed, is the relevant time for evaluating unforeseeability, for that is when the patentee presumptively

rationale underlying the amendment [bore] no more than a tangential relation to the equivalent in question," or that "there [was] some other reason suggesting that the patentee could not reasonably be expected to have described the insubstantial substitute in question." *Id.* at 740-41. Observing that the narrowing amendments at issue in this case were made for reasons of patentability, the Court remanded for this court or the district court to determine in the first instance whether Festo can demonstrate that those narrowing amendments did not surrender the particular equivalents in question. *January 28, 2004* The Court accordingly vacated and remanded the judgment of our *en banc* court. *Id.* at 742.

On remand, we asked the parties to brief the following issues:

1. Whether rebuttal of the presumption of surrender, including issues of foreseeability, tangentialness, or reasonable expectations of those skilled in the art, is a question of law or one of fact; and what role a jury should play in determining whether a patent owner can rebut the presumption.

2. What factors are encompassed by the criteria set forth by the Supreme Court.

3. If a rebuttal determination requires factual findings, then whether, in this case, remand to the district court is necessary to determine whether Festo can rebut the presumption that any narrowing amendment surrendered the equivalent now asserted, or whether the record as it now stands is sufficient to make those determinations.

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surrendered the subject matter in question and it is at that time that foreseeability is relevant. *See Pioneer Magnetics, Inc. v. Micro Linear Corp.*, 330 F.3d 1352, 1357 (Fed. Cir. 2003).

4. If remand to the district court is not necessary, then whether Festo can rebut the presumption that any narrowing amendment surrendered the equivalent now asserted.

Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 304 F.3d 1289, 1290-91 (Fed. Cir. 2002) (order). We received briefs from the parties and fifteen *amici curiae*, and we heard oral argument on these issues.

DISCUSSION

A. *Reinstatement of Our Undisturbed En Banc Holdings*

Before addressing the four issues briefed by the parties, we first take this opportunity to tie up the loose ends concerning our now-vacated holdings on the subject of prosecution history estoppel. Although, as a technical matter, our earlier *en banc* decision was vacated and we are free to revisit our prior conclusions, we reinstate those holdings of *Festo VI* that were not disturbed by the Supreme Court. To begin with, we recognize that the Court expressly endorsed our holding that a narrowing amendment made to comply with any provision of the Patent Act, including § 112, may invoke an estoppel. *Festo VIII*, 535 U.S. at 736; *see also Festo VI*, 234 F.3d at 566.

We next reinstate our holding that a "voluntary" amendment may give rise to prosecution history estoppel. *Festo VI*, 234 F.3d at 568. That separate holding was not considered, and certainly was not rejected, by the Supreme Court. *See Festo VIII*, 535 U.S. at 727-28. Moreover, it is consistent with the Court's remand, and its reinstatement confirms what we have already determined by an overwhelming 11-1 majority.

In addition, we clarify that the Supreme Court's *Warner-Jenkinson* presumption, which treats a narrowing amendment as having been made for a "substantial reason related to

patentability" when the record does not reveal the reason for the amendment, 520 U.S. at 33, remains intact after the Court's *Festo* decision, although the consequences of failing to overcome that presumption have been altered. In *Festo VI*, we held that such an "unexplained" amendment completely estops a patentee from relying on the doctrine of equivalents for the narrowed claim limitation. 234 F.3d at 578. Although the Supreme Court rejected that "complete bar" approach, it confirmed that a patentee's failure to overcome the *Warner-Jenkinson* presumption gives rise to the new *Festo* presumption of surrender. *Festo VIII*, 535 U.S. at 740 ("[W]hen the court is unable to determine the purpose underlying a narrowing amendment — and hence a rationale for limiting the estoppel to the surrender of particular equivalents — the court should presume that the patentee surrendered all subject matter between the broader and the narrower language."). A patentee is now entitled to rebut the presumption that an "unexplained" narrowing amendment surrendered the entire territory between the original and the amended claim limitations.

Thus, the *Warner-Jenkinson* and *Festo* presumptions operate together in the following manner: The first question in a prosecution history estoppel inquiry is whether an amendment filed in the Patent and Trademark Office ("PTO") has narrowed the literal scope of a claim. *Pioneer Magnetics, Inc. v. Micro Linear Corp.*, 330 F.3d 1352, 1356 (Fed. Cir. 2003). If the amendment was not narrowing, then prosecution history estoppel does not apply. But if the accused infringer establishes that the amendment was a narrowing one, then the second question is whether the reason for that amendment was a substantial one relating to patentability. *See id.* When the prosecution history record reveals no reason for the narrowing amendment, *Warner-Jenkinson* presumes that the patentee had a substantial reason relating to patentability; consequently, the patentee must show that the reason for the amendment was not

one relating to patentability if it is to rebut that presumption. *See id.* (citing *Warner-Jenkinson*, 520 U.S. at 33). In this regard, we reinstate our earlier holding that a patentee's rebuttal of the *Warner-Jenkinson* presumption is restricted to the evidence in the prosecution history record. *Festo VI*, 234 F.3d at 586 & n.6; *see also Pioneer Magnetics*, 330 F.3d at 1356 (stating that only the prosecution history record may be considered in determining whether a patentee has overcome the *Warner-Jenkinson* presumption, so as not to undermine the public notice function served by that record). If the patentee successfully establishes that the amendment was not for a reason of patentability, then prosecution history estoppel does not apply.

If, however, the court determines that a narrowing amendment has been made for a substantial reason relating to patentability — whether based on a reason reflected in the prosecution history record or on the patentee's failure to overcome the *Warner-Jenkinson* presumption — then the third question in a prosecution history estoppel analysis addresses the scope of the subject matter surrendered by the narrowing amendment. *See Pioneer Magnetics*, 330 F.3d at 1357. At that point *Festo VIII* imposes the presumption that the patentee has surrendered all territory between the original claim limitation and the amended claim limitation. *See Festo VIII*, 535 U.S. at 740. The patentee may rebut that presumption of total surrender by demonstrating that it did not surrender the particular equivalent in question according to the criteria discussed below. Finally, if the patentee fails to rebut the *Festo* presumption, then prosecution history estoppel bars the patentee from relying on the doctrine of equivalents for the accused element. If the patentee successfully rebuts the presumption, then prosecution history estoppel does not apply and the question whether the accused element is in fact equivalent to the limitation at issue is reached on the merits.

B. *The Roles of the Judge and Jury*

We turn now to resolution of the four issues that we asked the parties to brief after the Supreme Court's remand. In response to our first question regarding the proper roles of the judge and jury, Festo submits that, although the ultimate question whether prosecution history estoppel applies may be a question of law, rebuttal of the presumption of surrender is a question of fact with underlying factual issues that should be determined by a jury. In contrast, SMC posits that rebuttal of the presumption of surrender is a question of law for the court to decide and one in which a jury has no role to play.

We agree with SMC that rebuttal of the presumption of surrender is a question of law to be determined by the court, not a jury. Prosecution history estoppel has traditionally been viewed as equitable in nature, its application being "guided by equitable and public policy principles." *Loctite Corp. v. Ultraseal Ltd.*, 781 F.2d 861, 871 n.7 (Fed. Cir. 1985), *overruled on other grounds by Nobelpharma AB v. Implant Innovations, Inc.*, 141 F.3d 1059, 1068 (Fed. Cir. 1998); *see Black & Decker, Inc. v. Hoover Serv. Ctr.*, 886 F.2d 1285, 1295 (Fed. Cir. 1989); *Builders Concrete, Inc. v. Bremerton Concrete Prods. Co.*, 757 F.2d 255, 258 (Fed. Cir. 1985). We have stated on numerous occasions that whether prosecution history estoppel applies, and hence whether the doctrine of equivalents may be available for a particular claim limitation, presents a question of law. *E.g.*, *Bai v. L&L Wings, Inc.*, 160 F.3d 1350, 1354 (Fed. Cir. 1998); *Cybor Corp. v. FAS Techs., Inc.*, 138 F.3d 1448, 1460 (Fed. Cir. 1998) (en banc). The Supreme Court has recognized that, as a legal limitation on the application of the doctrine of equivalents, prosecution history estoppel is a matter to be determined by the court. *Warner-Jenkinson*, 520 U.S. at 39 n.8; *see also Multiform Desiccants, Inc. v. Medzam, Ltd.*, 133 F.3d 1473, 1480 (Fed. Cir. 1998) ("The court determines . . . whether there is any estoppel

derived from the prosecution history that bars remedy even when there is technologic equivalency . . . ."). Questions relating to the application and scope of prosecution history estoppel thus fall within the exclusive province of the court. Accordingly, the determinations concerning whether the presumption of surrender has arisen and whether it has been rebutted are questions of law for the court, not a jury, to decide.[3]

C. *Rebuttal of the Festo Presumption*

In response to our second question, the parties and several *amici* propose a variety of factors that they argue ought to be encompassed by the Supreme Court's test for rebuttal; other *amici*, including the United States, suggest that we should refrain from identifying such factors at this time and instead should address the relevant factors as they arise in future cases. In addition, the parties offer divergent views as to what evidence a court should consider in determining whether a patentee has rebutted the presumption of surrender. On the one hand, Festo submits that the district court should be permitted to consider any relevant evidence, whether documentary or testimonial, in evaluating rebuttal of the presumption. On the other hand, SMC argues that the court's evaluation of a patentee's rebuttal should be based on the prosecution history record.

In discussing its newly established presumption, the Supreme Court made clear that the patentee bears the burden of showing that a narrowing amendment did not surrender a

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[3] We recognize that rebuttal of the presumption may be subject to underlying facts, which we discuss in more detail below. Nonetheless, the resolution of factual issues underlying a legal question may properly be decided by the court. *See, e.g., Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 980-81 (Fed. Cir. 1995) (en banc), *aff'd*, 517 U.S. 370, 390 (1996) (claim construction).

particular equivalent and explained that a patentee may rebut the presumption of surrender by showing that "at the time of the amendment one skilled in the art could not reasonably be expected to have drafted a claim that would have literally encompassed the alleged equivalent." *Festo VIII*, 535 U.S. at 741. As indicated above, the Court identified the three ways in which the patentee may overcome the presumption. Specifically, the patentee must demonstrate that the alleged equivalent would have been unforeseeable at the time of the narrowing amendment, that the rationale underlying the narrowing amendment bore no more than a tangential relation to the equivalent in question, or that there was "some other reason" suggesting that the patentee could not reasonably have been expected to have described the alleged equivalent. *Id.* at 740-41. Because we cannot anticipate all of the circumstances in which a patentee might rebut the presumption of surrender, we believe that discussion of the relevant factors encompassed by each of the rebuttal criteria is best left to development on a case-by-case basis. However, we provide the following general guidance, which we apply to the patents in suit below, regarding the application of the three rebuttal criteria.

The first criterion requires a patentee to show that an alleged equivalent would have been "unforeseeable at the time of the amendment and thus beyond a fair interpretation of what was surrendered." *Id.* at 738. This criterion presents an objective inquiry, asking whether the alleged equivalent would have been unforeseeable to one of ordinary skill in the art at the time of the amendment. Usually, if the alleged equivalent represents later-developed technology (*e.g.*, transistors in relation to vacuum tubes, or Velcro® in relation to fasteners) or technology that was not known in the relevant art, then it would not have been foreseeable. In contrast, old technology, while not always foreseeable, would more likely have been foreseeable. Indeed, if the alleged equivalent were known in

the prior art in the field of the invention, it certainly should have been foreseeable at the time of the amendment. *See Pioneer Magnetics*, 330 F.3d at 1357. By its very nature, objective unforeseeability depends on underlying factual issues relating to, for example, the state of the art and the understanding of a hypothetical person of ordinary skill in the art at the time of the amendment. Therefore, in determining whether an alleged equivalent would have been unforeseeable, a district court may hear expert testimony and consider other extrinsic evidence relating to the relevant factual inquiries.

The second criterion requires a patentee to demonstrate that "the rationale underlying the narrowing amendment [bore] no more than a tangential relation to the equivalent in question." *Festo VIII*, 535 U.S. at 740. In other words, this criterion asks whether the reason for the narrowing amendment was peripheral, or not directly relevant, to the alleged equivalent. *See The American Heritage College Dictionary* 1385 (3d ed. 1997) (defining "tangential" as "[m]erely touching or slightly connected" or "[o]nly superficially relevant; divergent"); 2 *The New Shorter Oxford English Dictionary* 3215-16 (1993) (defining "tangential" as "merely touch[ing] a subject or matter; peripheral"). Although we cannot anticipate the instances of mere tangentialness that may arise, we can say that an amendment made to avoid prior art that contains the equivalent in question is not tangential; it is central to allowance of the claim. *See Pioneer Magnetics*, 330 F.3d at 1357. Moreover, much like the inquiry into whether a patentee can rebut the *Warner-Jenkinson* presumption that a narrowing amendment was made for a reason of patentability, the inquiry into whether a patentee can rebut the *Festo* presumption under the "tangential" criterion focuses on the patentee's objectively apparent reason for the narrowing amendment. As we have held in the *Warner-Jenkinson* context, that reason should be discernible from the prosecution history record, if the public

notice function of a patent and its prosecution history is to have significance. *See id.* at 1356 ("Only the public record of the patent prosecution, the prosecution history, can be a basis for [the reason for the amendment to the claim]. Otherwise, the public notice function of the patent record would be undermined."); *Festo VI*, 234 F.3d at 586 ("In order to give due deference to public notice considerations under the *Warner-Jenkinson* framework, a patent holder seeking to establish the reason for an amendment must base his arguments solely upon the public record of the patent's prosecution, *i.e.*, the patent's prosecution history. To hold otherwise — that is, to allow a patent holder to rely on evidence not in the public record to establish a reason for an amendment — would undermine the public notice function of the patent record."). Moreover, whether an amendment was merely tangential to an alleged equivalent necessarily requires focus on the context in which the amendment was made; hence the resort to the prosecution history. Thus, whether the patentee has established a merely tangential reason for a narrowing amendment is for the court to determine from the prosecution history record without the introduction of additional evidence, except, when necessary, testimony from those skilled in the art as to the interpretation of that record.

The third criterion requires a patentee to establish "some other reason suggesting that the patentee could not reasonably be expected to have described the insubstantial substitute in question." *Festo VIII*, 535 U.S. at 741. This category, while vague, must be a narrow one; it is available in order not to totally foreclose a patentee from relying on reasons, other than unforeseeability and tangentialness, to show that it did not surrender the alleged equivalent. Thus, the third criterion may be satisfied when there was some reason, such as the shortcomings of language, why the patentee was prevented from describing the alleged equivalent when it narrowed the

claim. When at all possible, determination of the third rebuttal criterion should also be limited to the prosecution history record. For example, as we recently held in *Pioneer Magnetics, Inc. v. Micro Linear Corp.*, 330 F.3d 1352 (Fed. Cir. 2003), a patentee may not rely on the third rebuttal criterion if the alleged equivalent is in the prior art, for then "there can be no other reason the patentee could not have described the substitute in question." *Id.* at 1357. We need not decide now what evidence outside the prosecution history record, if any, should be considered in determining if a patentee has met its burden under this third rebuttal criterion.[4]

D. *The Patents in Suit*

Having set forth the general legal standards that govern rebuttal of the presumption of surrender, we turn now to Festo's attempt to overcome that presumption with respect to the Stoll and Carroll patents. In response to our third and fourth questions, Festo argues that remand to the district court is necessary in this case so that it may develop the record according to the Supreme Court's newly created rebuttal criteria. Festo maintains that it will present documentary and testimonial evidence to demonstrate that the narrowing amendments to the Stoll and Carroll patents did not surrender the two equivalents in question. In contrast, SMC argues that further remand is not necessary because, as a matter of law,

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[4] Consistent with Supreme Court precedent, the holdings of that Court and our own regarding the *Festo* presumption of surrender and its rebuttal apply to all granted patents and to all pending litigation that has not been concluded with a final judgment, including appeals. *See Harper v. Va. Dep't of Taxation*, 509 U.S. 86, 97 (1993) ("When this Court applies a rule of federal law to the parties before it, that rule is the controlling interpretation of federal law and must be given full retroactive effect in all cases still open on direct review and as to all events, regardless of whether such events predate or postdate our announcement of the rule.").

Festo cannot rebut the presumption of surrender with respect to either accused equivalent.

Based on the parties' arguments and the prosecution history record, we conclude that Festo cannot show that the "magnetizable" and "sealing ring" amendments to the Stoll and Carroll patents were "tangential" or were made for "some other reason." However, because there exist factual issues relating to the objective unforeseeability of the two accused equivalents, we remand to the district court to determine whether Festo can rebut the presumption of surrender by demonstrating that the accused device's aluminum sleeve and sealing ring elements would have been unforeseeable to a person of ordinary skill in the art at the time of the amendments.

1. *SMC's Aluminum Sleeve*

Claim 1 of the application that issued as the Stoll patent originally recited a linear motor having a piston, a driven assembly, and a magnet arrangement. Stoll amended that claim during prosecution by, *inter alia*, adding the limitation that the driven member include "a cylindrical sleeve made of a *magnetizable* material." '125 patent, col. 6, ll. 2-3 (emphasis added). Because that narrowing amendment was made for a reason of patentability, *see Festo VIII*, 535 U.S. at 741, Stoll presumptively disclaimed the entire territory between the original limitation and the amended limitation, *i.e.*, any driven member that does not have "a cylindrical sleeve made of a magnetizable material." SMC's accused device includes a sleeve made of aluminum, a nonmagnetizable material. Thus, the question before us is whether Festo can show that the

"magnetizable" amendment did not surrender an aluminum sleeve.[5]

First, we are unable to determine whether Festo can satisfy the first rebuttal criterion on the current record. Although it seems unlikely that an aluminum sleeve would have been unforeseeable, as it was made of a commonly available metal, Festo argues that one skilled in the art at the time of the "magnetizable" amendment would not have foreseen the interchangeability of an aluminum alloy sleeve and a magnetizable alloy sleeve in Stoll's small gap design involving rare earth magnets. Factual issues thus exist as to whether an ordinarily skilled artisan would have thought an aluminum sleeve to be an unforeseeable equivalent of a magnetizable sleeve in the context of the invention. Accordingly, we remand to the district court on the question of unforeseeability to allow the parties to introduce evidence on this issue.

Second, however, we conclude that Festo has failed to show that the reason for the "magnetizable" amendment was only tangentially related to SMC's aluminum sleeve. Festo argues that the original claims in the Stoll patent were rewritten as a single independent claim in response to a § 112, ¶ 1 rejection, in which the examiner questioned whether the invention was a motor or a clutch, and that the "magnetizable"

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[5] SMC argues that Festo is completely barred from relying on the doctrine of equivalents for the "magnetizable" amendment because that amendment was "unexplained." However, as discussed above, an "unexplained" amendment — just like a narrowing amendment made for a reason of patentability — triggers a rebuttable presumption that the patentee has surrendered the entire territory between the original and the amended limitations. *See Festo VIII*, 535 U.S. at 740. Festo is thus entitled to attempt to rebut the presumption of surrender for the "magnetizable" amendment. In any event, the Supreme Court made clear that the "magnetizable" amendment gives rise to the *Festo* presumption of surrender. *See id.* at 741.

limitation was unnecessary to answer that question. Festo thus argues that the amendment was unnecessary to respond to (and thus only tangential to) the § 112 rejection; however, it fails to explain how the patentee's rationale for adding the term "magnetizable" was only tangential, or peripheral, to the accused equivalent of a *nonmagnetizable* aluminum sleeve. Because the prosecution history reveals no reason for the "magnetizable" amendment, *Festo VI*, 234 F.3d at 588, and because Festo still identifies no such reason, Festo has not shown that the rationale for the "magnetizable" amendment was only tangential to the accused equivalent. We therefore conclude that Festo cannot satisfy the "tangential" criterion for the aluminum sleeve equivalent.

Third, we conclude that Festo has pointed to no "other" reason why the patentee could not reasonably have been expected to have described an aluminum sleeve. Festo argues that it can satisfy the third rebuttal criterion by showing that Stoll could not reasonably have been expected to have drafted a claim to cover what was thought to be an inferior and unacceptable design. That argument does not help Festo in satisfying the "other" criterion; indeed, it suggests that Stoll could have described an aluminum sleeve but chose not to do so because that "inferior" element was not a part of his invention. In any event, it seems clear that there was no linguistic or "other" limitation to prevent Stoll from describing the accused equivalent. Although Stoll chose to claim a "magnetizable" sleeve, he reasonably could have been expected to have described a sleeve made of a common nonmagnetizable material, such as aluminum, if that were what he intended to claim. For example, Stoll could have described the accused equivalent at various levels of specificity by using a common descriptive term such as "aluminum" or "metal." We therefore conclude that Festo cannot satisfy the third rebuttal criterion for the aluminum sleeve equivalent.

2. *SMC's Sealing Ring*

Both the Stoll patent and the Carroll patent include "sealing ring" limitations that were added by amendments made in the PTO. With respect to the Stoll patent, claim 1 of the original application recited a linear motor that included a piston having "sealing means at each end." In response to an examiner's rejection during prosecution, Stoll amended claim 1 to recite "first sealing rings" and "second sealing rings." '125 patent, col. 5, l. 37 & col. 6, l. 11. It must therefore be presumed that Stoll surrendered all "sealing means" other than two-ring structures. With respect to the Carroll patent, claim 1 of the original application made no reference to sealing rings. During reexamination, however, Festo (as assignee of the Carroll patent) amended claim 1 (as new claim 9) to require "a pair of resilient sealing rings." '401 patent, col. 2, l. 14. Because that narrowing amendment was made for a reason of patentability, *see Festo VIII*, 535 U.S. at 741, Festo presumptively disclaimed devices that include other than two sealing rings. SMC's accused device includes a single two-way sealing ring. Thus, the question before us is whether Festo can demonstrate that the two "sealing ring" amendments did not surrender a single two-way sealing ring.

First, we cannot determine from the current record whether the accused sealing ring element would have been objectively unforeseeable at the time of the amendments. Festo argues that SMC's two-way sealing ring was an inferior and unforeseeable equivalent of the one-way sealing rings located at each end of the piston in the claimed invention. Factual issues thus exist as to whether a person of ordinary skill in the art would have considered the accused two-way sealing ring to be an unforeseeable equivalent of the recited pair of sealing rings. We therefore remand to the district court to determine, with the presentation of evidence as the court sees fit, the objective unforeseeability of a single two-way sealing ring.

Second, however, we conclude that Festo has not shown that the rationales underlying the "sealing ring" amendments were only tangentially related to a single two-way sealing ring. Festo argues that the "sealing ring" amendment in the Stoll patent was made to clarify the invention in response to a § 112 rejection, and that the amendment in the Carroll patent could not have distinguished the prior art based on the relevant aspect of the invention because the prior art disclosed a pair of sealing rings. Looking to the prosecution history, however, we earlier concluded that the "sealing ring" amendments in both the Stoll patent and the Carroll patent were made to distinguish prior art patents. With respect to the Stoll patent, we determined that the "sealing ring" amendment was made to distinguish two prior art patents that did not disclose sealing rings. *Festo VI*, 234 F.3d at 589 ("[N]either of [the two prior art patents] discloses the use of structure preventing the interference by impurities located inside the tube and on the outside of the tube while the arrangement is moved along the tube."). Similarly, with respect to the Carroll patent, we stated that, even though a prior art patent disclosed a piston with sealing rings, Festo distinguished that reference by claiming a combination of features that included a pair of sealing rings. *Id.* at 591. Thus, we have already determined that the two "sealing ring" amendments were made to distinguish prior art patents based, at least in part, on the "sealing ring" aspect of the invention. Nothing in the prosecution history or the Supreme Court's opinion has changed the soundness of those determinations. We therefore conclude that Festo cannot establish that the rationales underlying the "sealing ring" amendments were only tangentially related to SMC's accused sealing ring.

Third, we conclude that Festo has not established some "other" reason that the patentees could not reasonably have been expected to have described a single two-way sealing ring. Festo again argues that it can satisfy the third rebuttal criterion

by showing that the patentees could not reasonably have been expected to have drafted claims to cover an inferior and unacceptable design. We again reject that argument as unpersuasive because, if the patentees knew of an inferior design and chose not to include it within the claims, then it cannot be said that they could not have been expected to have described that design. Festo also argues that it would have been unreasonable to have expected Stoll to have broadened the original claim to cover the accused equivalent. Festo's premise — that the original claim did not encompass an equivalent two-way sealing ring — is in error, however. It overlooks our earlier conclusion, which we ratify here, that the original "sealing means" limitation literally encompassed structural equivalents under § 112, ¶ 6. *Id.* at 589. Therefore, SMC's single two-way sealing ring, if in fact equivalent, would have fallen within the literal scope of the original claim, and Festo's argument cannot succeed. More to the point, it cannot be said that there was a linguistic or "other" limitation preventing Stoll and Festo from describing the equivalent in question, especially where, as here, the difference between the claimed limitation and the accused equivalent is principally a difference in quantity. Instead of reciting "first sealing means . . . and second sealing means" or "a pair of . . . sealing rings," the patentees easily could have encompassed SMC's sealing ring by claiming, for example, "at least one sealing ring." We therefore conclude that Festo cannot rebut the presumption that Stoll and Festo surrendered a single two-way sealing ring under the third rebuttal criterion.

E. *Remand*

On remand, both parties may introduce evidence relating to the unforeseeability of the equivalents in question, as the trial court deems appropriate. If the court determines that Festo has failed to rebut the presumption of surrender, then prosecution history estoppel bars Festo from relying on the

doctrine of equivalents. If, however, the court determines that Festo has successfully rebutted the presumption with respect to either of the two accused equivalents, then the court may reinstate its and the jury's findings regarding equivalency in fact, as appropriate.

CONCLUSION

For the foregoing reasons, we conclude that Festo cannot overcome the presumption of surrender by showing that the narrowing amendments to the "magnetizable" and "sealing ring" limitations of the Stoll and Carroll patents were only "tangential" or were made for "some other reason." However, we remand to the district court to consider whether Festo can rebut the presumption by demonstrating that the two accused equivalents would have been unforeseeable to a person of ordinary skill in the art at the time of the amendments.

COSTS

No costs.

REMANDED

United States Court of Appeals for the Federal Circuit

95-1066

FESTO CORPORATION,

Plaintiff-Appellee,

v.

SHOKETSU KINZOKU KOGYO KABUSHIKI CO., LTD., a/k/a SMC CORPORATION, and SMC PNEUMATICS, INC.,

Defendants-Appellants.

RADER, *Circuit Judge*, concurring.

For a third (or perhaps a fourth) time, this court revisits some exceptions to an exception to an exception to the standard rule of infringement.[1] These many pronouncements on such a fine point beg the question of why this court and the Supreme Court have repeatedly returned to such a detail. A part of the answer is that these exceptions, like many facets of patent law, do not affect solely infringement principles. Like the proverbial balloon, a pinch on this backside of the law disrupts symmetry on the front side. In this case, the pinch to rein in the doctrine of equivalents disrupts a fundamental practice of patent

[1] *See Hilton Davis Chem. Co. v. Warner-Jenkinson Co.*, 114 F.3d 1161 (Fed. Cir. 1997) (*en banc*); *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 234 F.3d 558 (Fed. Cir. 2000) (*en banc*) (*Festo VI*); *Johnson & Johnston Assocs. Inc. v. R.E. Serv. Co.*, 285 F.3d 1046 (Fed. Cir. 2002) (*en banc*). Counting the Supreme Court's opinions, this opinion is the fifth or sixth visit to these exceptions to the exception to the doctrine of equivalents. *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 535 U.S. 722 (2002) (*Festo VIII*); *Warner Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17 (1997). Of course, by counting Federal Circuit panel opinions on this topic, the number could quickly rise into the dozens.

acquisition, namely that nearly every patent faces amendment during prosecution. While I concur in this court's most recent pronouncement, I write separately to highlight the difficulty of preserving expectations when frequently revising standards affecting the scope of patent coverage. The principle of foreseeability, I conclude, focuses on the correct inquiries to preserve expectations for patent holders.

Before the Supreme Court ventured to create new presumptions for the exception to the exception to the standard rule for infringement, claim amendments without a fulsome explanation of purpose did not "bar the application of the doctrine of equivalents."[2] *Warner Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 33 (1997). Instead, a flexible rule permitted courts to tailor the application of the doctrine of equivalents to the intent and breadth of the amendment. Thus, under the flexible rule, the courts genuinely sought to determine the scope of the surrendered subject matter and to estop any recapture of that scope under the doctrine of equivalents.[3] An amendment during prosecution did not work

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[2] Moreover, due to the pressure to keep up with rising patent filings, the prosecution process most often produces amendments without that fulsome explanation. According to United States Patent and Trademark Office statistics, about 67,000 applications were filed in 1950, about 103,000 in 1970, about 165,000 in 1990, and about 327,000 in 2001. *U.S. Patent Activity, at* http://www.uspto.gov/web/offices/ac/ido/oeip/taf/h_counts.htm.

[3] *Litton Sys., Inc. v. Honeywell, Inc.*, 140 F.3d 1449, 1462-64 (Fed. Cir. 1998) (an amendment barred some equivalents but not others, and remanding for factual determinations underlying prosecution history estoppel); *Dixie USA, Inc. v. Infab Corp.*, 927 F.2d 584, 588 (Fed. Cir. 1991) (an applicant may "obtain some degree of equivalence even in the face of prosecution history estoppel, . . . a total preclusion of equivalence should not apply"); *Hughes Aircraft Co. v. U.S.*, 717 F.2d 1351, 1362 (Fed. Cir. 1983) (rejecting as a "wooden application of estoppel" the view that virtually any amendment of the claims bars all resort to the doctrine of equivalents).

an entire forfeiture of equivalents beyond the scope of surrender. Of course, as documented by this court in *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 234 F.3d 558 (Fed. Cir. 2000) (*en banc*) (*Festo VI*), this court's first *Festo en banc*, that flexible rule engendered some imprecision.[4] Nonetheless that rule – now discarded – sought to preserve expectations of patent applicants.

In response to the demise of the flexible rule and the rise of new rules, an applicant must now avoid amendments, file more and increasingly specific claims (at the risk of prolonging the backlogged prosecution process), resort to less precise functional claims to preserve a statutory equivalent,[5] or perhaps even use continuation strategies[6] to protect claim scope. This court and the Supreme Court necessarily disturbed some settled expectations in the prosecution process, *Warner Jenkinson*, 520 U.S. at 41 (Ginsburg, J., concurring), to achieve more certainty in the enforcement process. Doctrinal changes in enforcement rules almost invariably affect as well the patent acquisition process.

Without belaboring the point, I venture to suggest that, at the pace of these changes in fundamental patent law, the noble objective of bringing more certainty to the doctrine of equivalents nonetheless exacts a price in unintended consequences. For instance, the Supreme Court's stringent

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[4] The problem is defining the scope of the surrender when an amendment literally abandons more subject matter than perhaps necessary to escape prior art or otherwise traverse the examiner's rejection.

[5] 35 U.S.C. § 112, paragraph 6 (2000), includes a statutory equivalent as part of the literal infringement inquiry.

[6] *See, e.g., Johnson & Johnston Assocs. Inc. v. R.E. Serv. Co.*, 285 F.3d 1046, 1055 (Fed. Cir. 2002) (*en banc*) (stating that while the doctrine of equivalents does not extend to disclosed but unclaimed subject matter, the applicant may claim such subject matter in a continuation).

estoppel presumptions also entail considerable unanticipated arbitrariness because examiners differ. Some examiners aggressively seek to narrow and define claims. Others demand far fewer amendments. Thus the application of the forfeiture presumption often depends on the luck of the examiner draw. In any event, the new certainty rules for equivalents (a rebuttable presumption that narrowing amendments erect a complete bar), at least for a period of time, may disrupt as much certainty as they provide. In particular, these new rules are likely to influence both the patent acquisition and enforcement processes in unpredictable ways.

To make my point clearer, much of the unpredictability of these changes lies in the pace of change. By common law standards, this court's jurisprudence moves at a lightning pace. This pace can engender uncertainty about the consequences of each new rule. This court met *en banc* to cabin the doctrine of equivalents in 1995. A scarce few years later, the doctrine is certainly more confined, but patent law also has numerous new rules affecting the scope of claims, the strategy of prosecuting a patent, and other aspects of invention law. Trial courts and practitioners have little time to assess the full impact of one rule before hit with another or an exception to the first. With exception added to exception, and presumptions rebutted by still newer presumptions, a practitioner can scarcely predict the scope of claims years in the future, when they are likely to be enforced, let alone the scope of claims drafted a few years ago when amendments did not potentially forfeit claim scope. In other words, the pace of the creation of new rules is itself disrupting the fundamental principle of certainty in the scope of patent claims.

With that word of caution about the pace and consequences of doctrinal shifts, I wish to emphasize that the principle of foreseeability, adopted by the Supreme Court, promises to bring the enforcement of the doctrine of equivalents together

with the expectations of the claim drafting process. With some period of stability and uniform application, the foreseeability principle promises to ease the pace and uncertainties inherent in this transition to new rules. Ultimately, as this court has noted in the past, *Sage Prods., Inc. v. Devon Indus., Inc.*, 126 F.3d 1420, 1425 (Fed. Cir. 1997), foreseeability is the overarching principle that reconciles the notice function of claims with the protective function of the doctrine of equivalents.

This reconciling principle is simple: the doctrine of equivalents does not embrace subject matter that the patent drafter could have foreseen during the application process and thus could have included in the claims. Thus, the literal scope of the claims alone defines invention scope in any foreseeable circumstances. At the same time, the doctrine of equivalents protects against insubstantial and unforeseeable circumstances. The Supreme Court has embraced that principle by stressing that this court must not apply "the complete bar by another name." *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 535 U.S. 722, 741 (2002) (*Festo VIII*). Because it continues to embrace the other aspects of the "complete bar" it created in *Warner Jenkinson*, the Supreme Court posits foreseeability as an important way[7] to render its complete bar estoppel

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[7] The tangentiality and "some other reason" grounds for rebutting the complete surrender presumption are also important ways to acknowledge the drafter's expectations when applying an estoppel. Tangentiality, in particular, should permit courts to honor the objective intent of amendments when seeking the scope of the surrender of subject matter. In the facts of the *Warner Jenkinson* case, for example, the applicant amended the claim to escape prior art on the top end of the claimed pH range. The alleged infringer sought to use prosecution history estoppel to foreclose use of the doctrine of equivalents to capture its product that used a pH below the claimed range. In that case, the amendment's surrender of subject matter above the claimed range may diverge from or only bear a peripheral relation to an equivalent beneath the claimed range. Similarly, by its terms, the "some other reason" rebuttal grounds requires courts to consider reasons,

presumptions more sensitive to the patent drafter's (and amender's) expectations.

Upon reflection, foreseeability will continue to emerge as the unifying principle that justifies the doctrine of equivalents even beyond the confines of rebutting estoppel presumptions. Because the foreseeability principle incorporates a realistic vision of what the applicant intended to achieve by claim drafting and amendments, this principle pledges to uphold, rather than disrupt, drafting expectations. The foreseeability principle has the virtue of placing the judicial enforcer at the table of the patent drafter at the time of claiming or amending. From that vantage point and with knowledge of the prior art, the judge (guided by experts) can deduce something close to the bounds that a careful drafter would have drawn to define the invention.

Under the foreseeability principle, the doctrine of equivalents will not encompass any accessible prior art because this subject matter could have been included in the claims. On the other hand, any after-arising technology or later developments or advances would not fall within the scope of what the drafter should have foreseen and claimed. After all, a skilled patent drafter is a legal technician, not an inventor.

This enterprise depends on the intensely factual considerations of the state of the art at the time of drafting. In applying the foreseeability exception, the trial court must assess the factual record of events during prosecution, the factual contents of custom and usage of terms in the relevant art, the factual level of ordinary skill in the art, the factual bounds of the prior art, and the factual understanding of a person of

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including as this court notes "the shortcomings of language," that "the patentee could not reasonably be expected to have described the insubstantial substitute in question." Maj. op. at 14 (citing *Festo VIII*, 535 U.S. at 741).

ordinary skill in the art at the time of invention. A trial judge, who can freely elicit evidence as needed and can directly interact with technical experts, is thus in a better position to apply the foreseeability exception. By the same token, the trial judge's findings deserve deference from this court.

At this point the Supreme Court has only applied foreseeability to identify the scope of surrendered subject matter for an estoppel. But applying the foreseeability principle directly to bar foreseeable equivalents outside an amendment and estoppel context is very consistent with the Supreme Court's holding. This principle in operation promises to preserve drafting expectations while honoring the notice function of claims.

United States Court of Appeals for the Federal Circuit

95-1066

FESTO CORPORATION,

Plaintiff-Appellee,

v.

SHOKETSU KINZOKU KOGYO KABUSHIKI CO., LTD., a/k/a SMC CORPORATION, and SMC PNEUMATICS, INC.,

Defendants-Appellants.

NEWMAN, *Circuit Judge*, concurring in part, dissenting in part, in which MAYER, *Chief Judge*, joins.

Technology has come to dominate modern industry and culture, and patent principles have evolved as a primary economic incentive for innovation. Our strength as a nation is grounded in our technologic leadership and entrepreneurial energy, and in our competitive vigor. The proper balance among invention, innovation, and competition is a matter of national concern. The doctrine of equivalents is part of that balance. The importance of the issue led the Federal Circuit and the Supreme Court to reconsider this body of long-established judge-made law.

The doctrine of equivalents was judicially created in order to preserve the value of patents as against imitators, described in *Graver Tank* as the "unscrupulous copyist." 339 U.S. 605, 607 (1950). The Court reaffirmed in *Festo*:

> If patents were always interpreted by their literal terms, their value would be greatly diminished.

> Unimportant and insubstantial substitutes for certain elements could defeat the patent, and its value to inventors could be destroyed by simple acts of copying.

Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 535 U.S. 722, 731 (2002). The Court recognized that "the doctrine of equivalents renders the scope of patents less certain," *id.* at 732, and that "this uncertainty [is] the price of ensuring the appropriate incentives for innovation." *Id.* In this context the Court, while rejecting the Federal Circuit's imposition of an absolute bar to equivalency of amended claim elements, did not return to the status quo ante. Instead, in *Festo* the Court brought increased rigor to the estoppels generated during patent examination.

A patentee's access to infringement remedy under the doctrine of equivalents has long been subordinate to the estoppels that arise during examination. The patentee cannot reach, through equivalency, that which was disclaimed in order to obtain the patent. This requires judicial determination of what was yielded during examination, and its effect on particular alleged equivalents. The uncertainties of such determination has led to increasing constraints on application of the doctrine. In *Festo* the Court acted to limit access to equivalency in the circumstance when a claim, as initially presented by the applicant, had literally encompassed the device later alleged to be equivalent; when such claim was amended so that it no longer encompassed the alleged equivalent, the Court held that estoppel presumptively applies to the entire territory between the scope of the original proposed claim and the claim as amended. This presumption can be rebutted, but only on grounds "where the amendment cannot reasonably be viewed as surrendering a particular equivalent." 535 U.S. at 740.

Thus the Court tightened access to the doctrine of equivalents, for this presumption of surrender may arise even when the particular equivalent was not described in prior art, and even when the alleged equivalent was not a ground of rejection and was not disclaimed. When this presumption arises, rigorous criteria must be met for rebuttal. These criteria reflect the additional constraints that flow when the applicant had initially presented claims that included the now-alleged equivalent. My concern with the actions of this court on remand is with its interpretation and application of this new presumption and the Court's rebuttal criteria.

The Court remanded, to this court and the district court, for application of these principles to Festo's Carroll and Stoll patents, and specifically for determination of "what territory the amendments surrendered" and "whether petitioner can demonstrate that the narrowing amendments did not surrender the particular equivalents at issue." *Festo*, 535 U.S. at 741. My colleagues now implement the presumption of surrender in ways that enlarge the surrendered territory, and implement the rebuttal analysis by converting two of the Court's three rebuttal criteria into questions of law and then deciding them, sua sponte, without trial or record. My colleagues deny Festo's request to present evidence as to these issues despite their status as questions of first impression.

From this flawed implementation of the Court's decision, I respectfully dissent.

I concur in the court's ruling that determination of the presumption of surrender and its rebuttal is for the court and is decided without a jury, by analogy to the decision in *Markman v. Westview Instruments, Inc.*, 517 U.S. 370 (1996). I also concur in the remand to the district court for determination of the rebuttal issue of unforeseeability, although I object to the prejudgments with which the remand is encumbered. I do not

agree with the treatment of the factual criteria of "tangentialness" and "other reasons" as questions of law, or with the adjudication of these new issues without permitting evidence and argument in accordance with the procedures of trial.

I

The doctrine of equivalents is not an end in itself. No patentee plans to rely on protection outside of the patent's claims, as support for invention and investment. Disputed issues of equivalency generally arise only after an innovative advance has been successfully commercialized, and others appropriate the benefit thereof while skirting the claims. Thus the doctrine of equivalents is a tool of a technology-based economy; it is an indicator of the policy balance between creativity and imitation.

A national economic policy that weighs on the side of fostering development and investment in new technology will have a different approach to the law of equivalency than an economic policy aimed at facilitating competition by minor change in existing products. Any tightening or loosening of access to the doctrine of equivalents shifts the balance between inventor and copier. The high public interest in this case reflects these fundamentals, for the administration of this law affects major commercial and societal interests. The number and diversity of the amicus curiae[1] briefs reflect the complexity

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[1] Briefs were filed by the American Council on Education *et al.*; American Intellectual Property Law Ass'n; Association of the Bar of the City of New York; Association of Patent Law Firms; Bar Ass'n of the District of Columbia; Biotechnology Industry Org.; Cargill, Inc. *et al.*; Consumer Project on Technology; Eli Lilly & Co.; Federal Circuit Bar Ass'n; Federation Internationale Des Conseils en Propriété Industrielle; Intel Corp.; Sterne, Kessler, Goldstein, & Fox, P.L.L.C.; the United States; and the Washington State Bar Ass'n.

of these concerns and the variety of viewpoints among technology-based enterprises. The public interest here is not in the fate of these litigants and these long-expired patents; the interest is in the way this judgemade law affects technologic innovation and competition.

II

The Supreme Court remanded with instructions to determine, first, "what territory the amendments surrendered," *Festo*, 535 U.S. at 741, implementing the presumption of surrender that arises when a claim as originally filed covered the alleged equivalent, and was subsequently narrowed by amendment. The facts of the Carroll and Stoll patents raise several issues of first impression, questions whose resolution is fundamental to application of the Court's new presumption.

For the Carroll reexamination patent, the only element for which equivalency is at issue is the claimed pair of sealing rings. The SMC devices use a single two-way sealing ring. The original Carroll patent claims, as filed and prosecuted and granted, did not include sealing rings or any other sealing element. The broadest claim of the original patent was:

> 1. A device for moving articles comprising a cylinder of non-ferrous material, a piston including a permanent magnet having a pole-piece on each axial side thereof, a body disposed outside and adjacent to said cylinder, said body including a permanent magnet which substantially surrounds the cylinder, there being a pole piece on each axial side of the permanent magnet included in said body, and means for controlling the admission of pressure fluid into the cylinder and exhaust of fluid from the cylinder for moving the piston in the cylinder, the attractive forces between the permanent magnets

> being such that movement of the piston causes corresponding movement of the body below a predetermined load on the body and such that above said predetermined load movement of the piston does not cause corresponding movement of the body.

Festo requested reexamination in light of previously uncited German references, unrelated to the sealing rings element. With the reexamination application Festo presented new claim 9, that contained all the limitations of original patent claims 1, 2, 7, and 8, plus a clause to a pair of sealing rings:

> a pair of resilient sealing rings situated near opposite axial ends of the central mounting member and engaging the cylinder to effect a fluid-tight seal therewith

During prosecution no rejection and no argument was directed to the sealing rings, although other elements of the claims were mentioned by the applicant and the examiner. No amendment was made to the sealing rings in the reexamination application.

The Court's new presumption of estoppel is founded on the premise that the patentee, by narrowing amendment, "disclaimed" a "material difference" between the claims before and after amendment. *Festo*, 535 U.S. at 734, quoting *Exhibit Supply Co. v. Ace Patents Corp.*, 315 U.S. 126, 136-137 (1942). The presumption of surrender requires that the claims as originally presented covered the alleged equivalent and that the entire intervening territory was presumptively yielded by the amendment.

Festo argues that no territory with respect to the sealing rings was surrendered during prosecution. Festo points out that the sealing rings could not have been claimed more broadly

because the only structure disclosed in the specification is the pair of sealing rings. Festo stresses the Court's statement that "What is claimed by the patent application must be the same as what is disclosed in the specification; otherwise the patent should not issue." 535 U.S. at 736. The parties and the amici curiae recognized that there is a significant difference between claims that were initially of a scope that included the alleged equivalent and were narrowed by amendment that excluded the equivalent, and claims that did not include the equivalent and were not narrowed by amendment.

My colleagues hypothesize that Festo could have presented a claim to "at least one sealing ring," and thus rule that the surrendered territory includes the accused SMC single sealing ring, although no such claim was requested. Festo points out that if such a claim had been presented for reexamination it would have been subject to rejection as new matter or for enlarged claim scope prohibited by 35 U.S.C. §305. Judicial hindsight is not a basis for rewriting the prosecution record, and the points raised by Festo should not be ignored. The question of the scope of the presumptively surrendered territory is material to this remand, and to guide further application of the Court's decision.

Related questions are present for the Stoll patent. The elements for which equivalency is at issue are the pair of sealing rings and the sleeve of magnetizable material. In the Stoll application both of these elements were initially claimed, and the issue is the scope of the surrendered territory. Like the Carroll patent, these aspects are not adequately considered in the majority opinion.

The Stoll patent is the United States counterpart of a patent initially filed in Germany, and was filed as a translation of the German application. It contained claims in a dependent form that did not conform to United States practice. The relevant

claims as initially filed follow, with emphases added to the elements for which equivalency is at issue:

> 1. A linear motor for use in a conveying system, said motor being operable by a pressure medium and comprising a tubular part connectible to a source of the pressure medium, a piston which is slidable in said tubular part and which has *sealing means at each end for wiping engagement with an internal surface of the tubular part and so as to form a seal for the pressure medium*, and a driven assembly which is slidable on the tubular part and which has means at each end for wiping engagement with an external surface of the tubular part, the piston and the driven assembly each carrying a drive magnet arrangement in the form of a hollow cylindrical assembly, each magnet arrangement having radial play relative to the adjacent surface of the tubular part, and surfaces of the magnet arrangements which face the tubular part being closely adjacent to the respective surfaces of the tubular part.
>
> 4. A linear motor according to any of claims 1 to 3, wherein *the sealing means of the piston comprise sealing rings* and the piston is provided with sliding guide rings near the sealing rings.
>
> 8. A linear motor according to any of the preceding claims *wherein the driven assembly is provided with a sleeve made of magnetizable material*, which encircles the hollow cylindrical assembly of the magnet arrangement.

The Examiner rejected all of the claims under §112 ¶1, on the ground: "Exact method of operation unclear. Is device a true motor or magnetic clutch?" The Examiner also rejected claims 4-12 under §112 ¶2 for improper multiple dependent form. No other rejection was made. In response Stoll changed "linear

motor" to "an arrangement," and rewrote the claims. Stoll cancelled claim 1 and added claim 13 that included, inter alia, the elements of original claims 4 and 8:

> 13. In an arrangement having a hollow cylindrical tube and driving and driven members movable thereon for conveying articles, the improvement comprising
>
> wherein said tube is made of a nonmagnetic material,
>
> wherein said driving member is a piston movably mounted on the inside of said tube, said piston having a piston body and plural axially spaced, first permanent annular magnets encircling said piston body,
>
> said piston further including first means spacing said first permanent magnets in said axial spaced relation, the radially peripheral surface of said magnets being oriented close to the internal wall surface of said tube,
>
> said piston further including plural guide ring means encircling said piston body and slidingly engaging said internal wall and
>
> *first sealing rings located axially outside said guide rings for wiping said internal wall* as said piston moves along said tube to thereby cause any impurities that may be present in said tube to be pushed along said tube so that said first annular magnets will be free of interference from said impurities,

> wherein said driven member includes a cylindrical *sleeve made of a magnetizable material* and encircles said tube,
>
> said sleeve having plural axially spaced second permanent annular magnets affixed thereto and in magnetically attracting relation to said first permanent annular magnets
>
> and second means spacing said second permanent annular magnets in said axially spaced relation, the radially inner surface of said magnets being oriented close to the external surface of said tube,
>
> said sleeve having end face means with second sealing rings located axially outside said second permanent annular magnets for wiping the external wall surface of said tube as said driven member is moved along said tube in response to a driving movement of said piston to thereby cause any impurities that may be present on said tube to be pushed along said tube so that said second permanent annular magnets will be free of interference from said impurities.

(Emphases added.) Claim 13 was allowed without rejection.

For the sealing rings, original claim 1 recited "sealing means" for the internal surface, original claim 4 claimed "sealing rings," and new claim 13 claimed "first sealing rings." Festo argues that the original claims, construed in light of the specification, do not include the SMC single two-way sealing ring. Festo also argues that since "sealing rings" were claimed in original claim 4, the territory surrendered between claim 4 and claim 9 does not include the single two-way sealing ring. The issue of the role of subordinate claims in determining the surrendered territory is raised by the parties, for although claim

1 is broader than claim 4, both were original claims. Resolution is necessary to this case.

For the sleeve of magnetizable material, a further variation arises. The sleeve of magnetizable material was claimed in original claim 8; its scope was not changed. Festo argues that since this element was originally claimed, and was never narrowed by amendment, no territory was surrendered. SMC argues that Stoll's original claim 1 did not mention a sleeve of any material, and therefore that this scope was unlimited, and was narrowed when claim 1 was cancelled, despite the presence of original claim 8. Again, the question of the role of subordinate claims in determining the territory of surrender is squarely raised, and requires resolution.

It is improper simply to assume that all potential equivalents were surrendered in all cases, whatever the nature and scope of the original claims and whatever the relation of the amendment to the original claims. These aspects have wide implications, as the amici curiae recognized,[1] and should not be decided by indirection and without discussion.

III

The Court held that to rebut the presumption of surrender the "patentee must show that at the time of the amendment one skilled in the art could not reasonably be expected to have drafted a claim that would have literally encompassed the alleged equivalent." 535 U.S. at 741. The Court identified three general classes of rebuttal criteria: (1) unforeseeability of

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[1] Various *amicus* briefs pointed out the complex implications for patent prosecution, for it is customary to present broad and successively narrow claims, to rewrite or cancel claims, and to move elements between dependent and independent claims. The *amici* pointed out that such routine actions may now have unforeseeable consequences, and impose new pitfalls, costs, and burdens on inventors.

the equivalent; (2) whether the reason for the amendment had only a tangential relation to the equivalent; and (3) some other reason why the patentee could not reasonably be expected to have retained literal coverage of the equivalent. *Id.* at 740-741.

The patentee must establish that although the entire intervening territory was presumptively surrendered, the particular alleged equivalent was not surrendered. Festo states that it can meet the Court's rebuttal criteria, and has proffered evidence as to all three criteria. This court now denies Festo the opportunity to present evidence as to the two criteria of tangentialness and some other reason, establishing these criteria as questions of law, not fact, and decides these questions of first impression without development and without evidence. As to these criteria, Festo has been deprived of both trial and appeal.

1. Unforeseeability

I concur in the remand for trial of the issue of unforeseeability, although I strongly object to the court's inappropriate prejudgments of the facts on remand. For example, for the magnetizable sleeve, Festo states that it will present evidence that "one skilled in the art at that time of the application would not have foreseen the interchangeability of an aluminum alloy sleeve with the sleeve of magnetizable material in the STOL small gap design." Festo proffers evidence of the technologic complexity and state of understanding of the subject matter, the context in which the amendments were presented, the content of the prior art, and the nature of the SMC equivalent material. My colleagues announce that it is "unlikely" that Festo can establish unforeseeability, because aluminum is a "commonly available metal." However, the evidence on remand is entitled to be weighed at trial without this court's thumb on the scale.

The court also rules that known equivalents cannot be unforeseeable, stating that any "alleged equivalent known in the prior art in the field of the invention, certainly should have been foreseeable at the time of the amendment." This is not the holding of *Pioneer Magnetics, Inc. v. Micro Linear Corp.*, 330 F.3d 1352 (Fed. Cir. 2003), which the court cites as authority. In *Pioneer Magnetics* the court held that when the alleged equivalent was described in a reference that was cited during prosecution, and the narrowing amendment "was made to avoid the very prior art that contained the equivalent," the equivalent thereby distinguished cannot have been unforeseeable. The *Pioneer* rationale was not that the equivalent technology was foreseeable because it was known, but that it was foreseeable because it had been specifically cited and disclaimed during prosecution. Those are not the facts of this case, for the amendments to the Carroll and Stoll patents were not made to avoid the SMC equivalents or to distinguish prior art that disclosed these equivalents.[1]

This question of first impression should be remanded to the district court without encumbrance and without prejudgment, for appropriate exploration of the facts, and application of law to found facts. The parties are entitled to the opportunity to present evidence of this and the other criteria of rebuttal, in the context and with the safeguards of trial. *See Icicle Seafoods, Inc. v. Worthington*, 475 U.S. 709, 714 (1986) (for "findings of fact essential to a proper resolution of the legal

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[1] Several *amici curiae* pointed out the incongruity whereby equivalency in fact follows from known (foreseeable) interchangeability, *see Warner-Jenkinson Co. v. Hilton Davis Chemical Co.* 520 U.S. 17, 25 (1997) ("'An important factor is whether persons reasonably skilled in the art would have known of the interchangeability of an ingredient not contained in the patent with one that was.'") (quoting *Graver Tank & Mfg. Co. v. Linde Air Products Co.*, 339 U.S. 605, 609 (1950)), yet the patentee must now prove unforeseeability in order to gain access to the doctrine, of equivalents.

question [the Court of Appeals] should have remanded to the District Court to make those findings"); *Pullman-Standard v. Swint*, 456 U.S. 273, 291-92 (1982) ("[Factfinding] is the basic responsibility of district courts, rather than appellate courts, and . . . the Court of Appeals should not have resolved in the first instance this factual dispute which had not been considered by the District Court.") (quoting *De Marco v. United States*, 415 U.S. 449, 450 (1974)). (All alterations in original.)

2. Tangential Relation to the Reason for the Amendment

The Court ruled that there is no "call to foreclose claims of equivalence for aspects of the invention that have only a peripheral relation to the reason the amendment was submitted." 535 U.S. at 738. Rebuttal on this ground may arise, for example, when a claim was amended to distinguish a specific reference, and the amendment also excluded subject matter that was unrelated to the reference. Thus the reason why a claim was amended may be evidence of whether the alleged equivalent is sufficiently unrelated to the prosecution rationale as to rebut the presumptive surrender.

The court limits the evidence of this criterion to the prosecution record. However, the factors relevant to determination of tangential relation are unlikely to reside in the prosecution record, for unrelated subject matter or unknown equivalents are unlikely to have been discussed by either the examiner or the applicant. The issue of "tangentialness" may require consideration of how the reason for an amendment affected the patentee's view that certain technology was extraneous. The prosecution record rarely discusses devices that are not prior art.

Festo and amici curiae have described various factors that may be relevant to the question of tangential or peripheral relation, such as the nature of the prosecution action, the content of any references that led to a narrowing amendment,

and the differences between the claimed subject matter and the alleged equivalent. The example is offered that if the reason for an amendment were compliance with an enablement rejection, then it may be relevant whether the later-arising equivalent could be practiced without undue experimentation. Such evidence would not reside in the prosecution record.

Festo had not been informed that its evidence is limited to the prosecution record, upon which this court now decides the issue without Festo having had the opportunity to prove its case. At the trial prosecution history estoppel was not at issue; SMC told the district court that "this is not really a prosecution history estoppel case." *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 72 F.3d 857, 863 (Fed. Cir. 1995). Now that it is such a case, Festo is surely entitled to develop an evidentiary record. The court's refusal to remand on this ground of rebuttal, ruling that evidence outside the prosecution record is not admissible, renders this rebuttal criterion unlikely ever to be met.

3. Some Other Reason

The Court's third rebuttal criterion of "some other reason suggesting that the patentee could not reasonably be expected to have described the insubstantial substitute in question" avoids foreclosing the opportunity of rebuttal in unanticipated situations. It is unnecessary to rule in advance that "some other reason" is narrowly limited to "shortcomings of language" and generally to the prosecution record. Like tangentialness, if some other reason arises that relates to the alleged equivalent, evidence would be more likely to reside outside of the prosecution record than within it.

The Court's concern with language appears to be directed not to the simple meaning of words, but to the prescience of inventors as they explore new technology. Festo raises the argument that it "could not be expected to draft a claim to cover

all insubstantial modifications an infringer may dream up;" indeed, this is a policy question of consequential impact on the content of patent specifications. Insofar as the "inadequacy of language" is considered as a ground of rebuttal, the subject engaged Judge Hand in *Philip A. Hunt Co. v. Mallinckrodt Chemical Works*, 177 F.2d 583 (2d Cir. 1949), who observed that "obviously it is impossible to enumerate all possible variants. Indeed, some degree of permissible latitude would seem to follow from the doctrine of equivalents, which was devised to eke out verbal insufficiencies of claims." *Id.* at 585.

This court, however, approaches the criterion of "some other reason" from the opposite direction, ruling that it is necessary for Festo to show some reason that "prevent[ed] Stoll from describing the accused [aluminum] equivalent." The court imposes the requirement that the inventor was actually prevented from describing an unknown equivalent, in order to rebut the presumption of surrender – and that the reason was contained in the prosecution history – a virtual impossibility.

All three classes of rebuttal raise questions of fact and all raise questions of first impression, requiring full and fair exploration of the issues with benefit of the procedures of trial. The court's limitation of the presentation of evidence that may serve to rebut the presumption of surrender constricts judicial ability to render a just decision.

CONCLUSION

The Supreme Court in its *Festo* decision balanced the needs of patentees for adequate protection of their inventions, and the needs of would-be competitors for adequate notice of the scope of that protection. This court's application of the Court's decision in *Festo* places new and costly burdens on inventors, and reduces the incentive value of patents. By adopting a generous interpretation of the scope of surrender, and stinginess toward its rebuttal, the ensuing framework is one that few patentees can survive.

APPENDIX B

United States Court of Appeals for the Federal Circuit

95-1066

FESTO CORPORATION,

Plaintiff-Appellee,

v.

SHOKETSU KINZOKU KOGYO KABUSHIKI CO., LTD., a/k/a SMC CORPORATION, and SMC PNEUMATICS, INC.,

Defendants-Appellants.

FILED
U.S. COURT OF APPEALS FOR THE FEDERAL CIRCUIT
NOV –5 2003
JAN HORBALY
CLERK

ON PETITION FOR REHEARING EN BANC

Before MAYER, *Chief Judge*, NEWMAN, MICHEL, *Circuit Judges*, PLAGER, *Senior Circuit Judge*, LOURIE, CLEVENGER, RADER, SCHALL, BRYSON, GAJARSA, LINN, DYK, and PROST, *Circuit Judges*.

ORDER

The Festo Corporation ("Festo") and Shoketsu Kinzoku Kogyo Kabushiki Co., Ltd., a/k/a SMC Corporation, and SMC Pneumatics, Inc. (collectively "SMC") have each filed a petition for rehearing en banc. The petitions were circulated to

the judges who issued the en banc decision on September 26, 2003.

Upon consideration thereof,

IT IS ORDERED THAT:

(1) Festo's petition for rehearing en banc is denied.

(2) SMC's petition for rehearing en banc is denied.

(3) The mandate of the court will issue on November 12, 2003.

FOR THE COURT

NOV –5 2003
Date

/s/ Jan Horbaly
Jan Horbaly
Clerk

cc: [list omitted in printing]